

09/831413

1/12

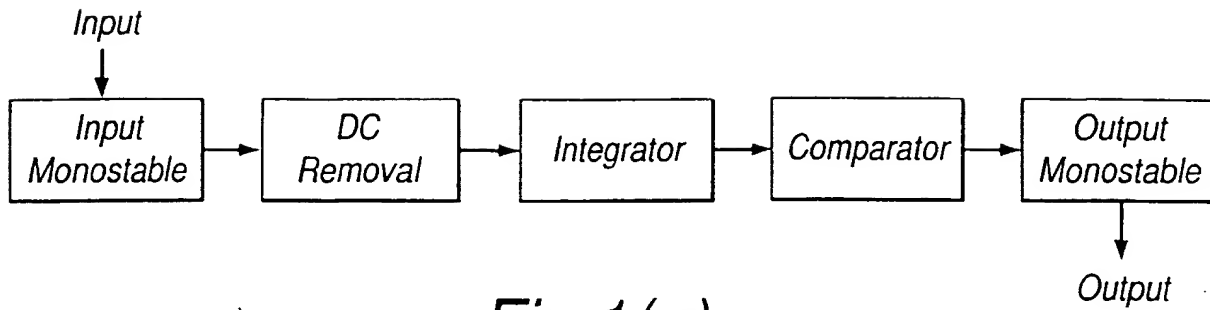


Fig.1(a)

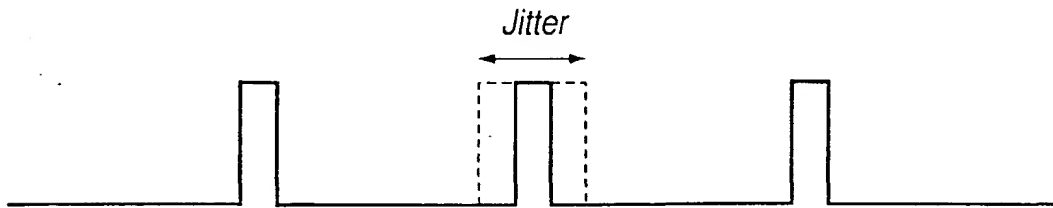


Fig.1(b)

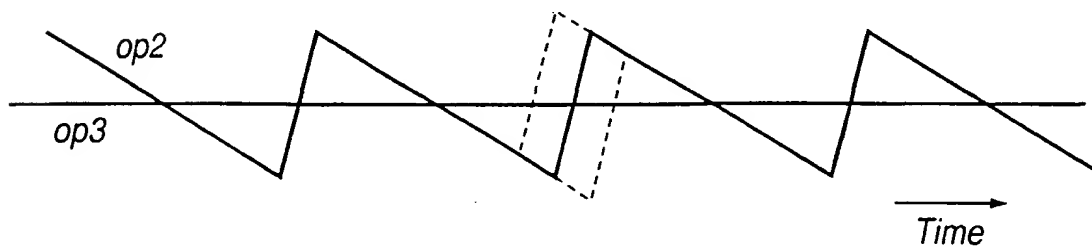


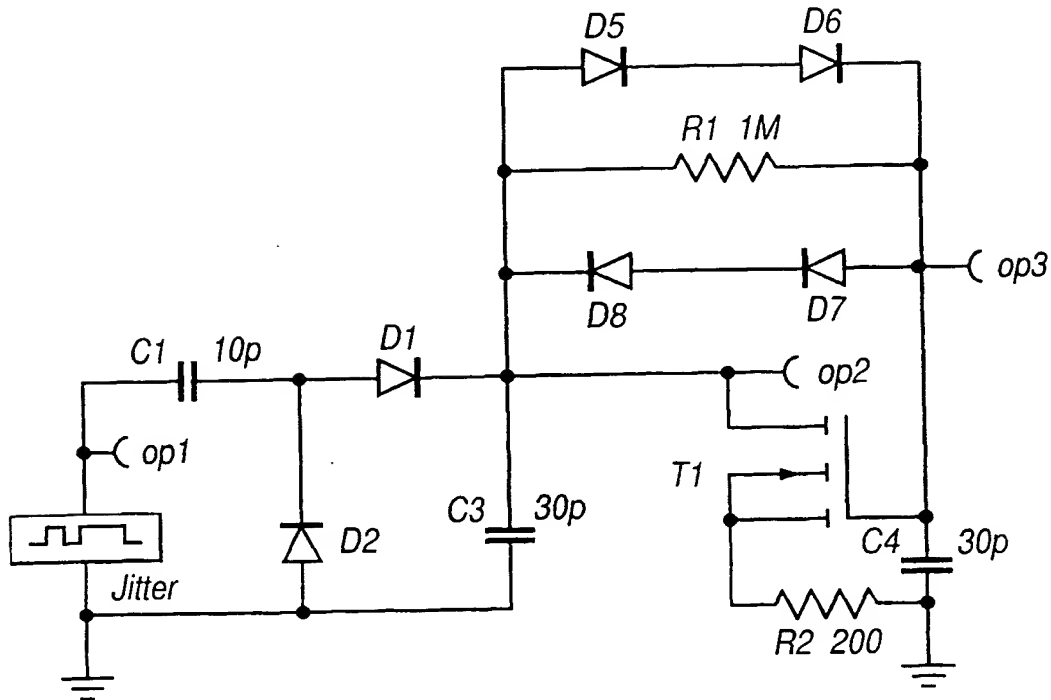
Fig.1(c)

Fig.1 Anti Jitter Circuit Principle:-

- (a) Basic Block Diagram
- (b) Input with jitter on central pulse
- (c) Integrator output (op2) and Comparator switching level (op3)

24/1/99

2/12



T1:- n-MOS enhancement
Threshold 0v Beta 300uA/VV

op2 and op3 to differential comparator

Mean $F_{in} = 417\text{kHz}$ and $1/3$ rate phase jumps of 150°
= Time Jitter of 1 usec in 2.4 usec at $1/3$ rate

Fig.2(a)

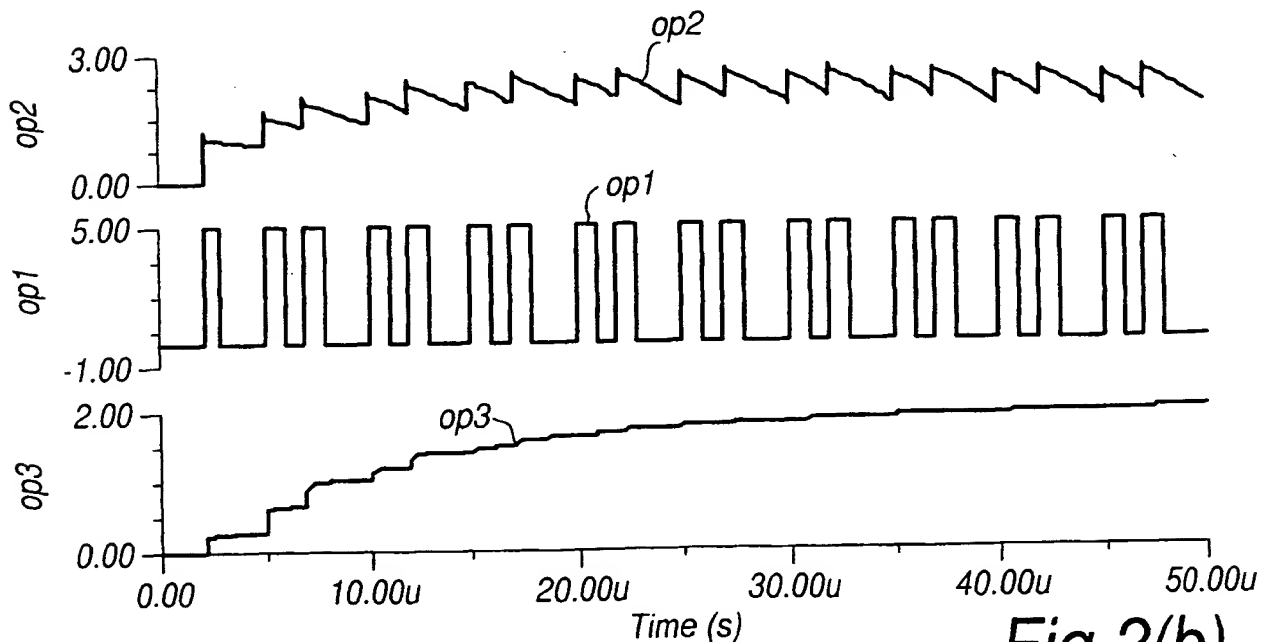


Fig.2(b)

09/83/4/3

3/12

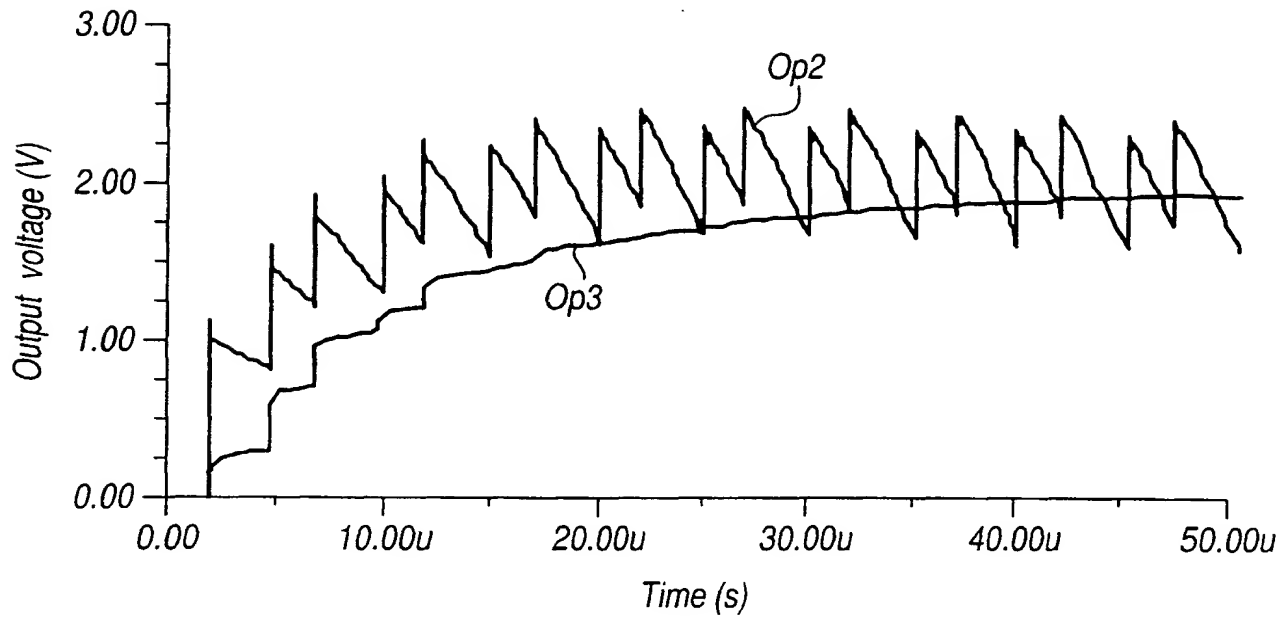


Fig. 2(c)

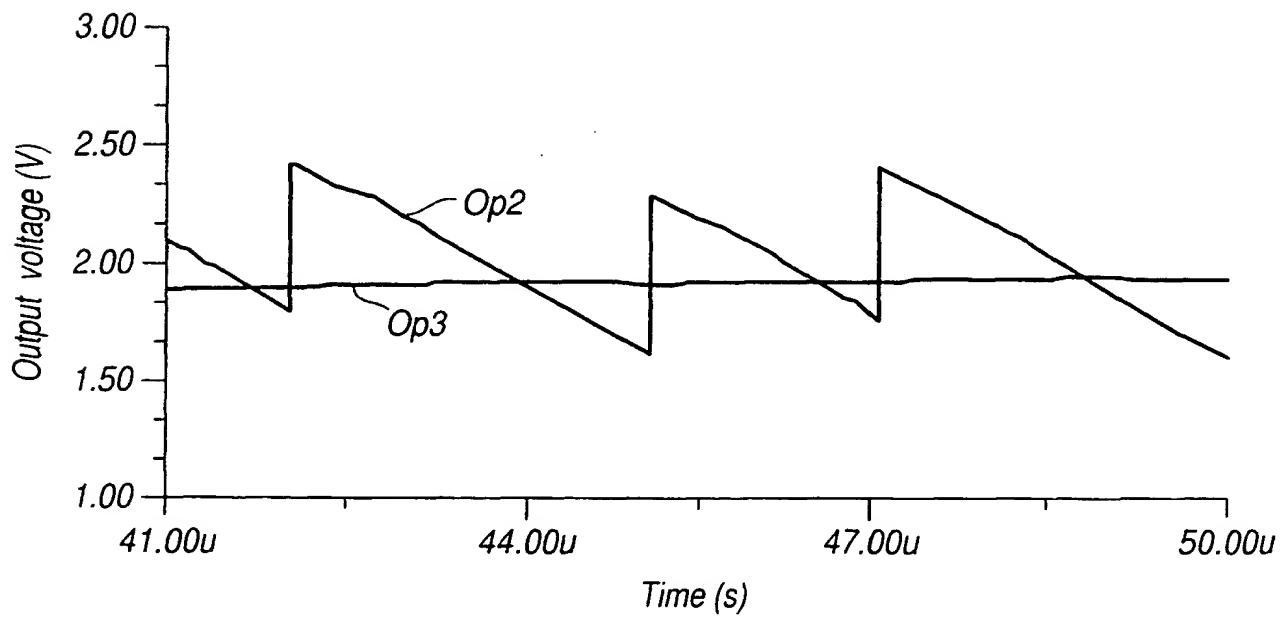
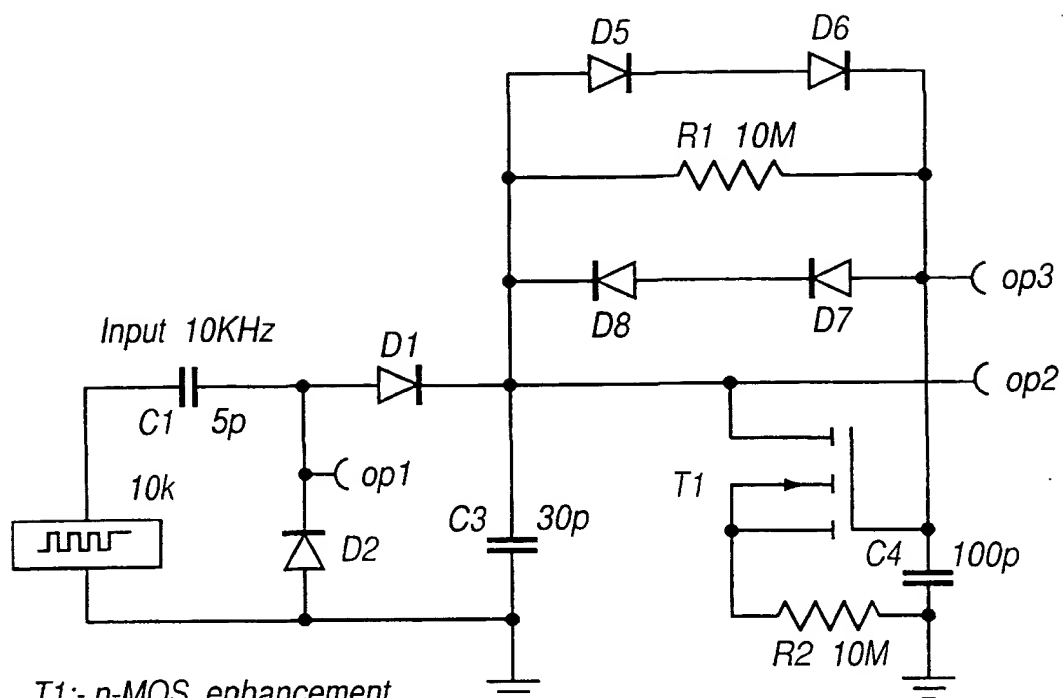


Fig. 2(d)

4/12



T1:- n-MOS enhancement
Threshold 0v Beta 300uA/VV

op2 and op3 to differential comparator

Fig.3(a)

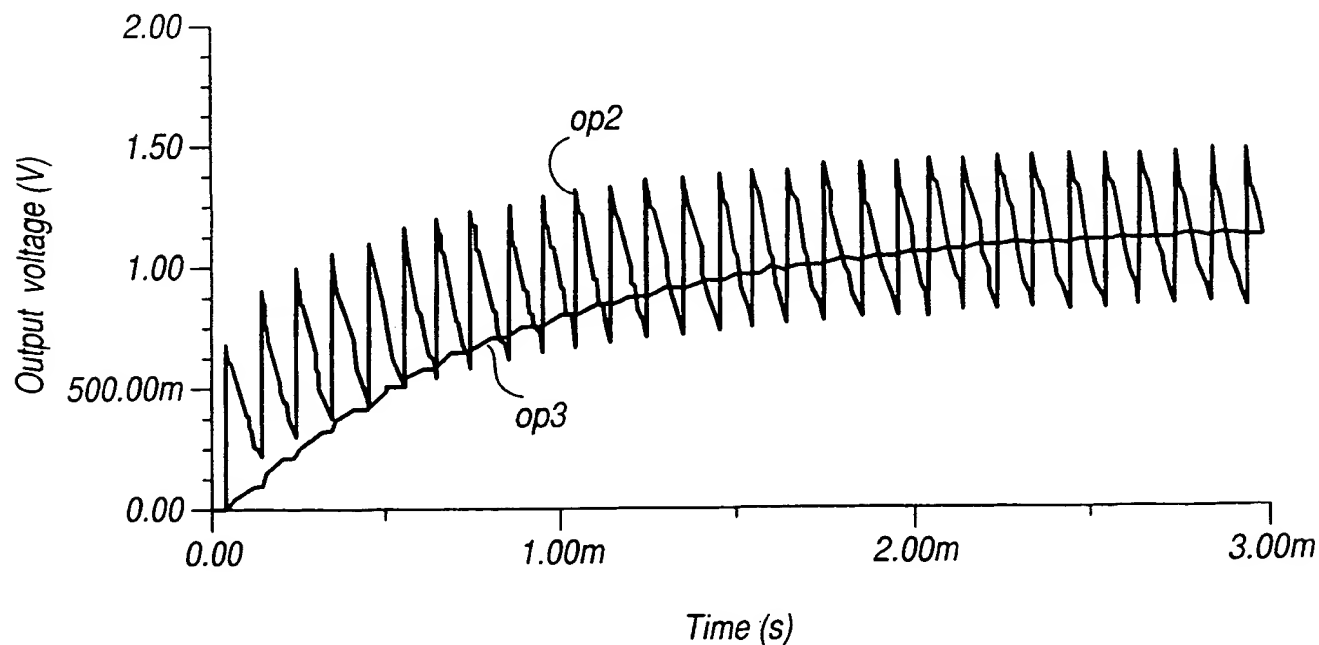
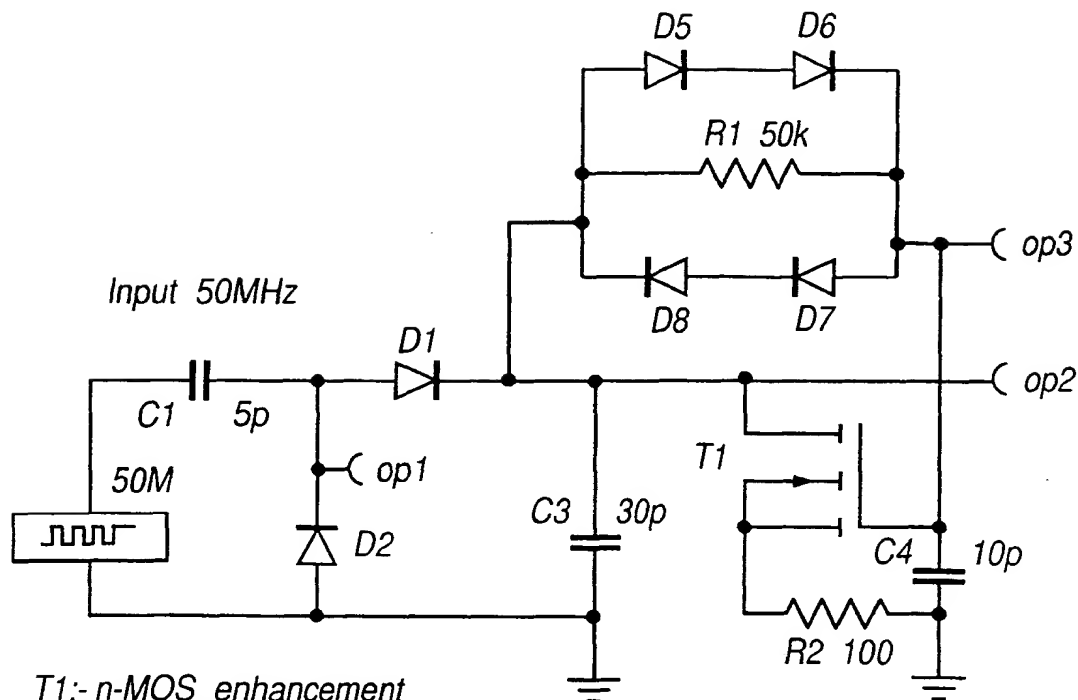


Fig.3(b)

07/831413

5/12



T1:- n-MOS enhancement
Threshold 0v Beta 300uA/VV

op2 and op3 to differential comparator

Fig.4(a)

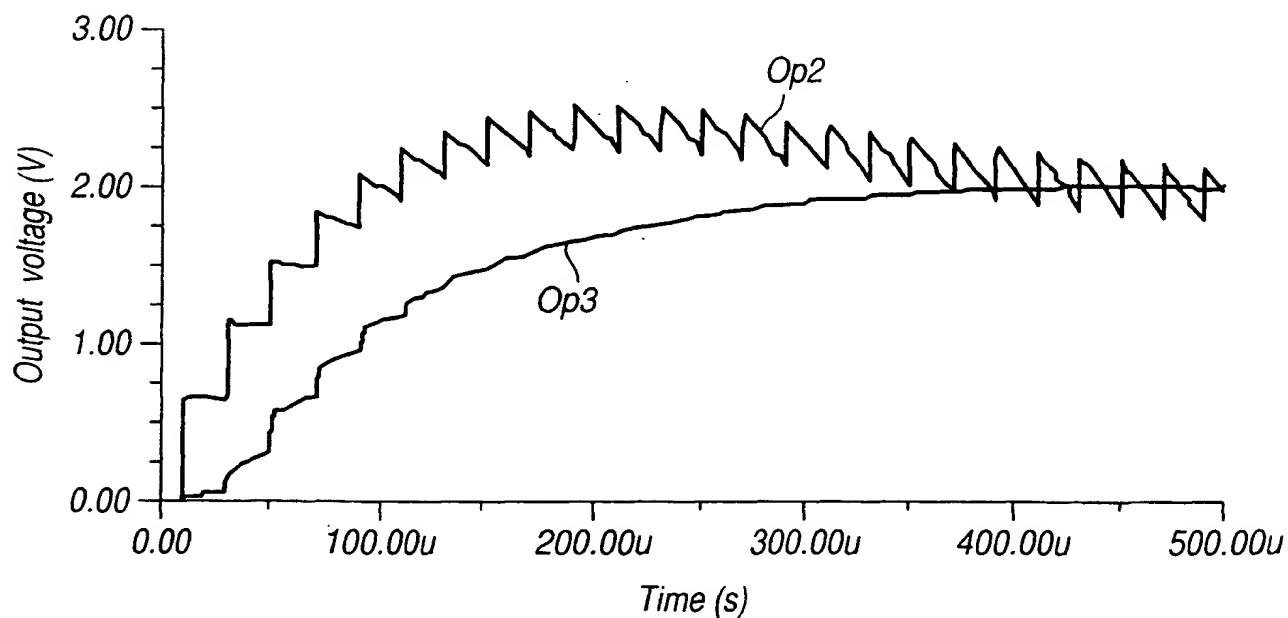
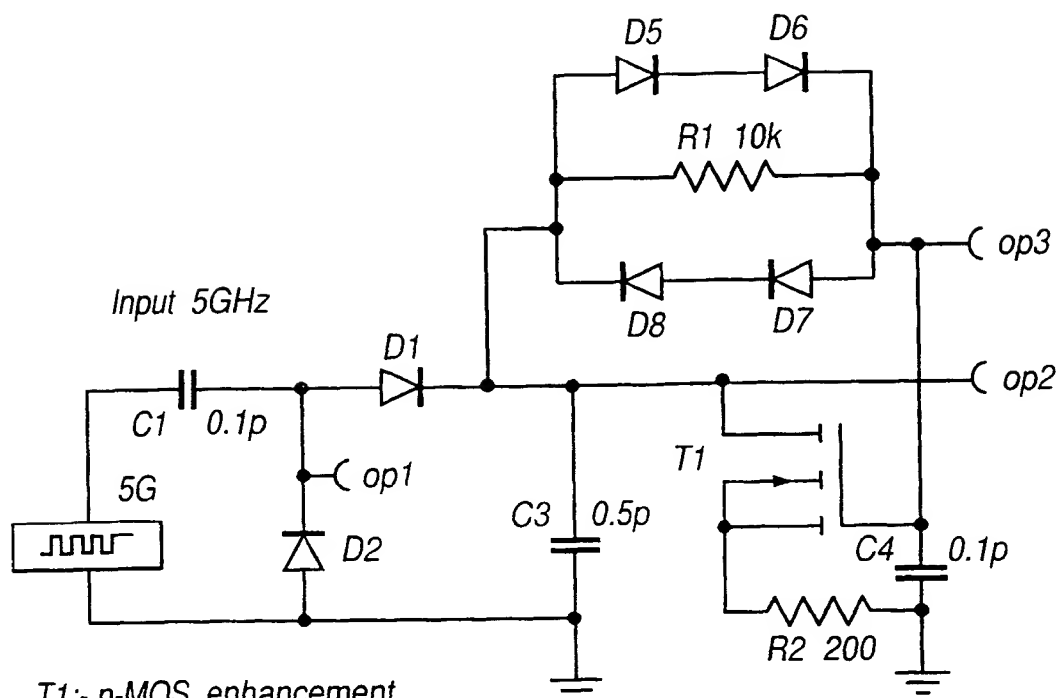


Fig.4(b)

6/12



T1:- n-MOS enhancement
Threshold 0v Beta 300uA/VV

op2 and op3 to differential comparator

Fig.5(a)

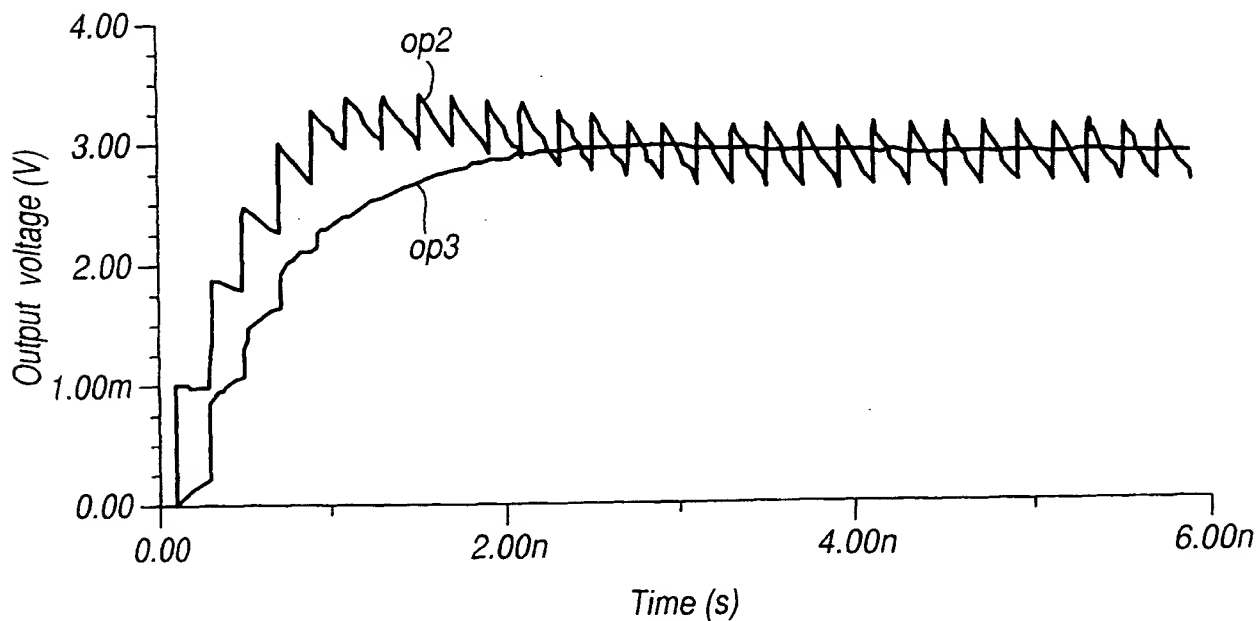
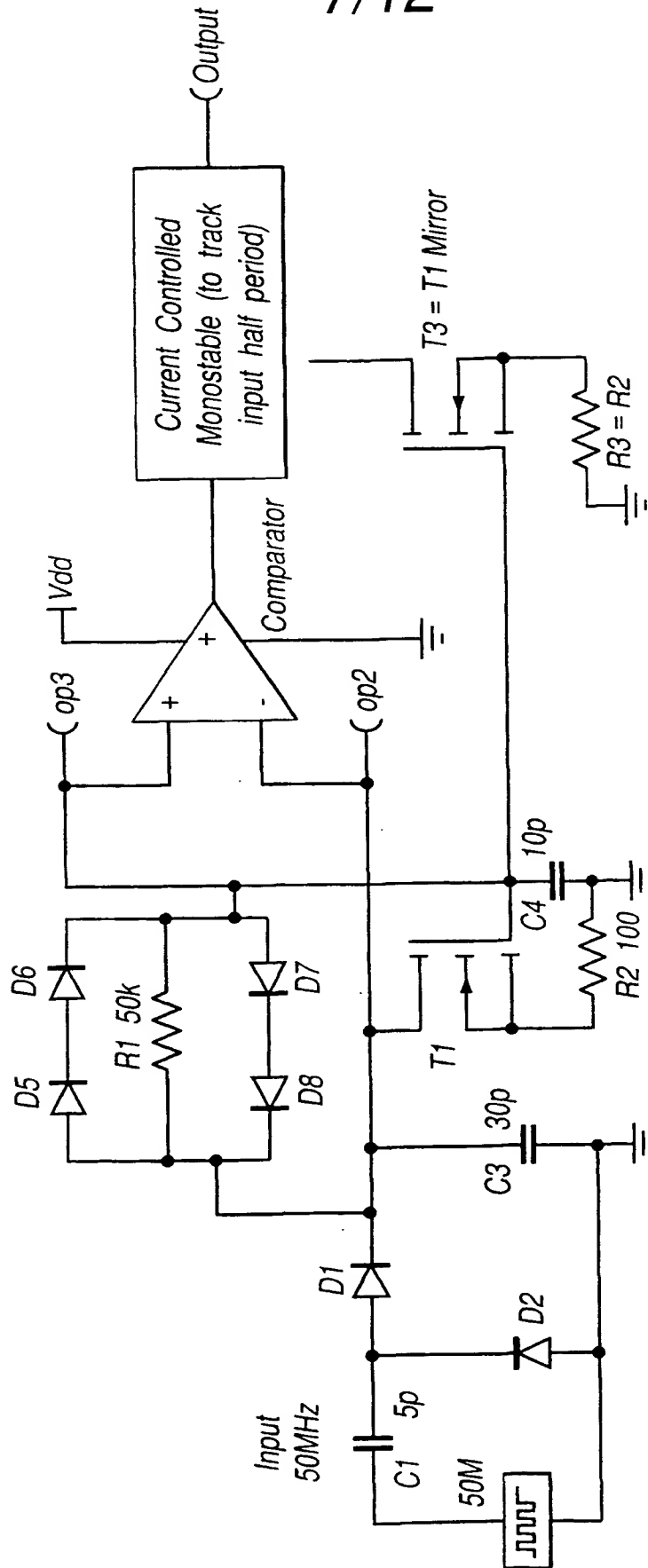


Fig.5(b)

7/12



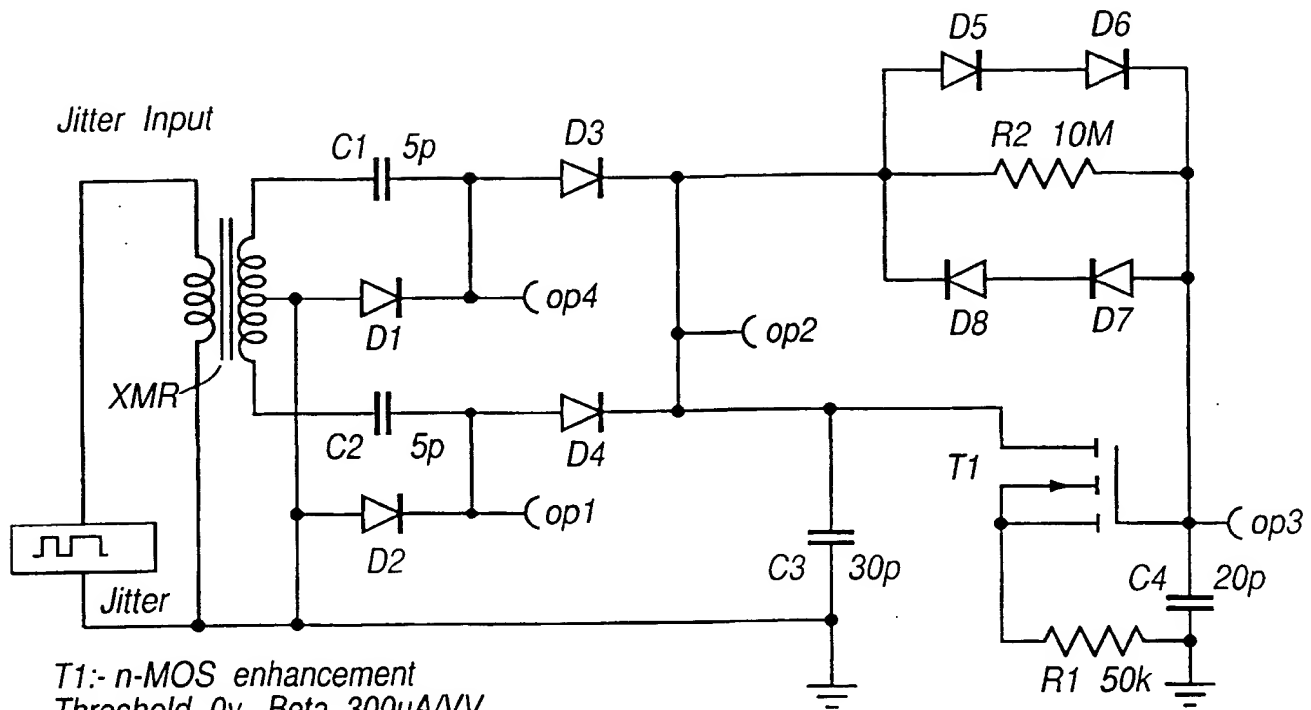
T1:- n-MOS enhancement
Threshold 0v Beta 300uA/VV

op2 and op3 to differential comparator

Fig.6

AAJC with Comparator and input-tracking Output Monostable

8/12



op2 and op3 to differential comparator

Mean $F_{in} = 417\text{kHz}$ and $1/3$ rate phase jumps of 150 degrees
= Time Jitter of 1 usec in 2.4 usec at $1/3$ rate

Fig.7(a)

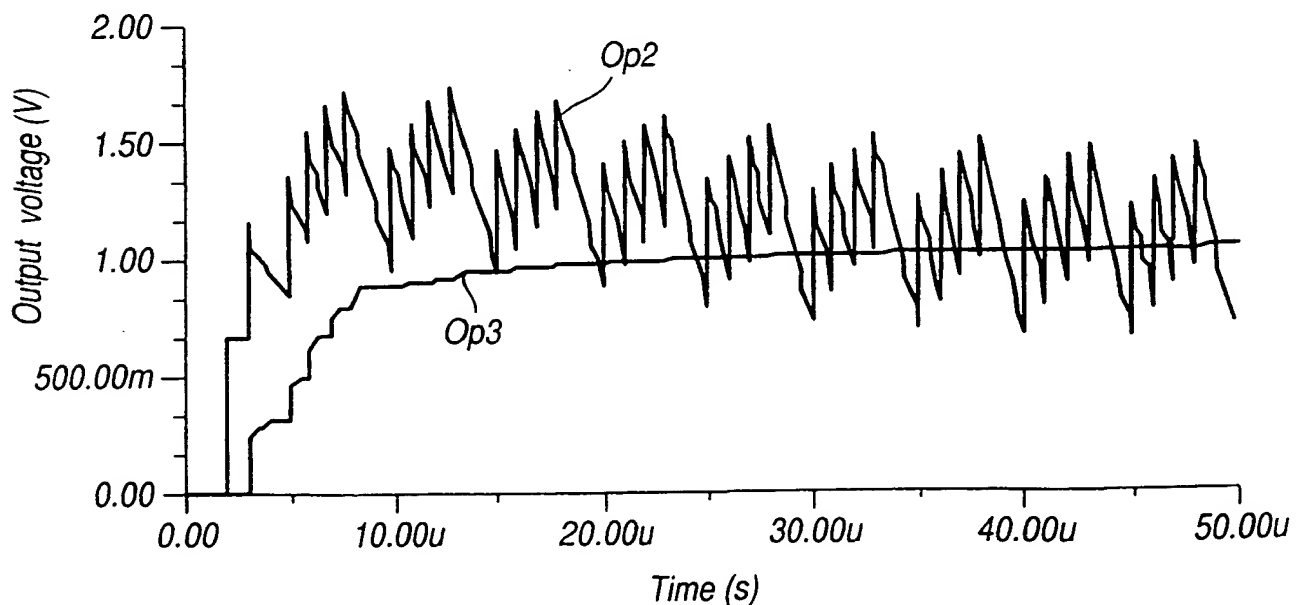


Fig.7(b)

09/83/413

9/12

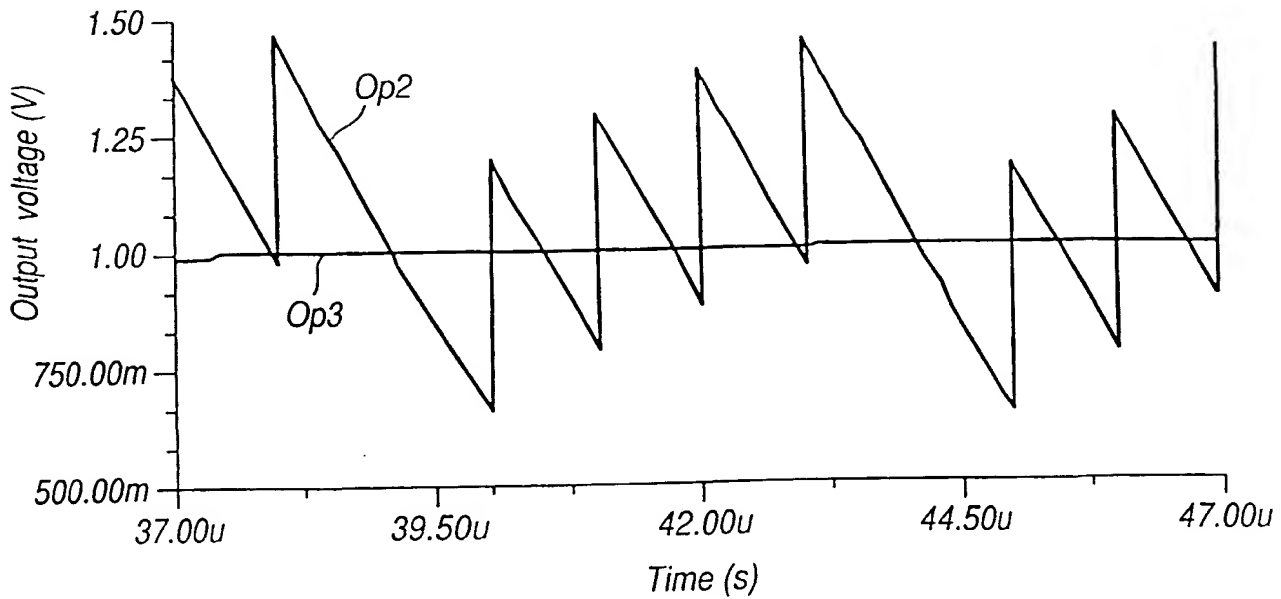
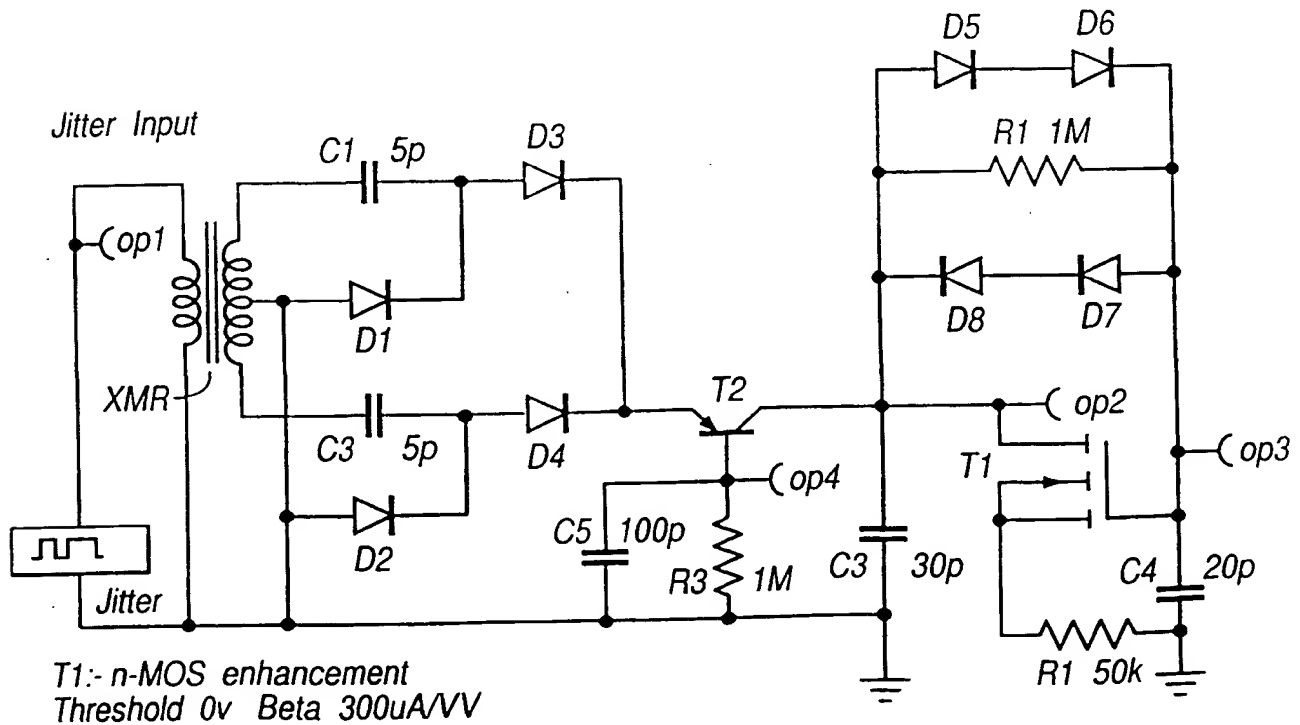


Fig.7(c)



op2 and op3 to differential comparator

Mean $F_{in} = 417\text{kHz}$ and $1/3$ rate phase jumps of 150°
 = Time Jitter of $1\text{ }\mu\text{s}$ in $2.4\text{ }\mu\text{s}$ at $1/3$ rate

Fig.8(a)

09/831413

10/12

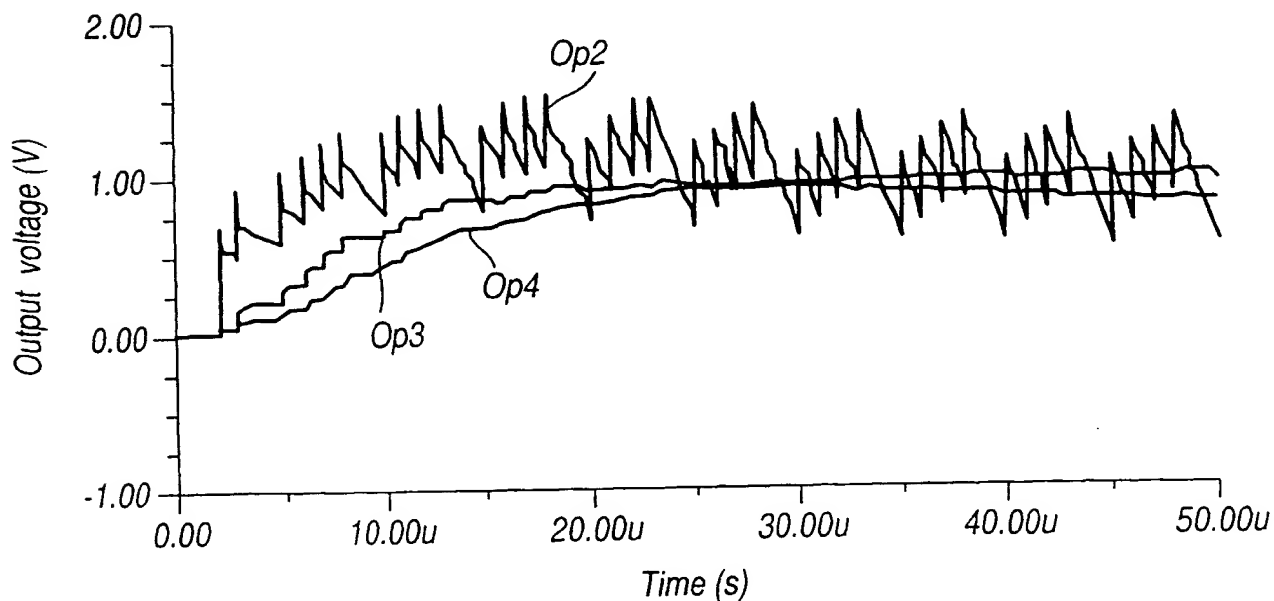


Fig. 8(b)

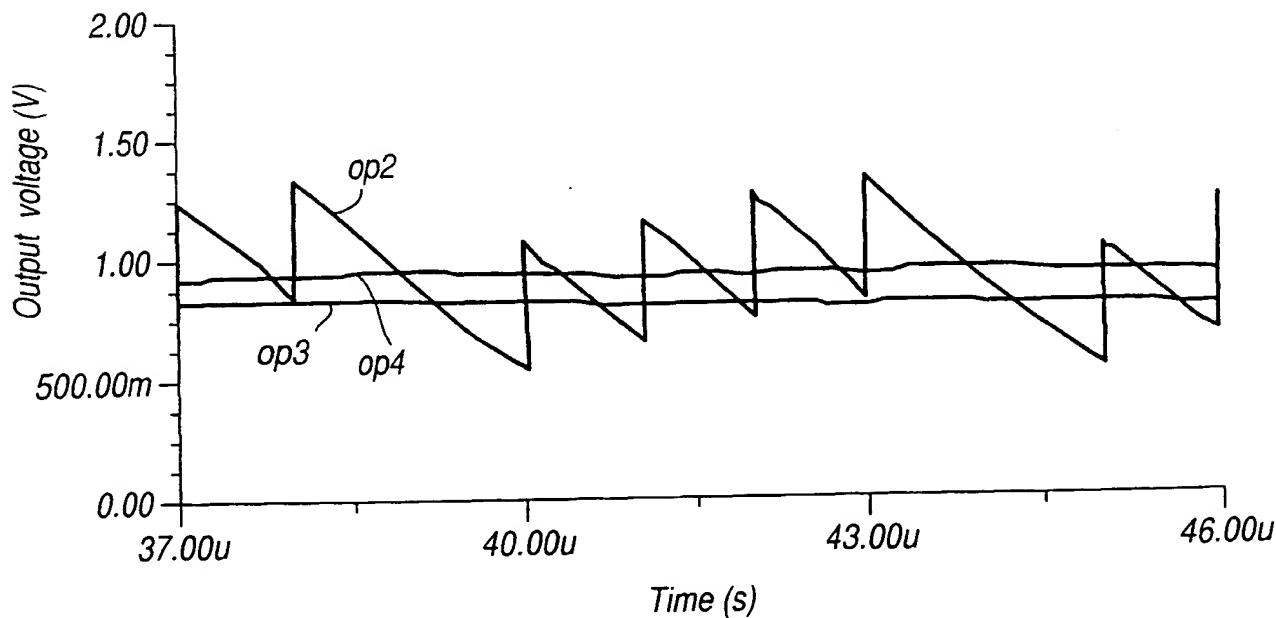
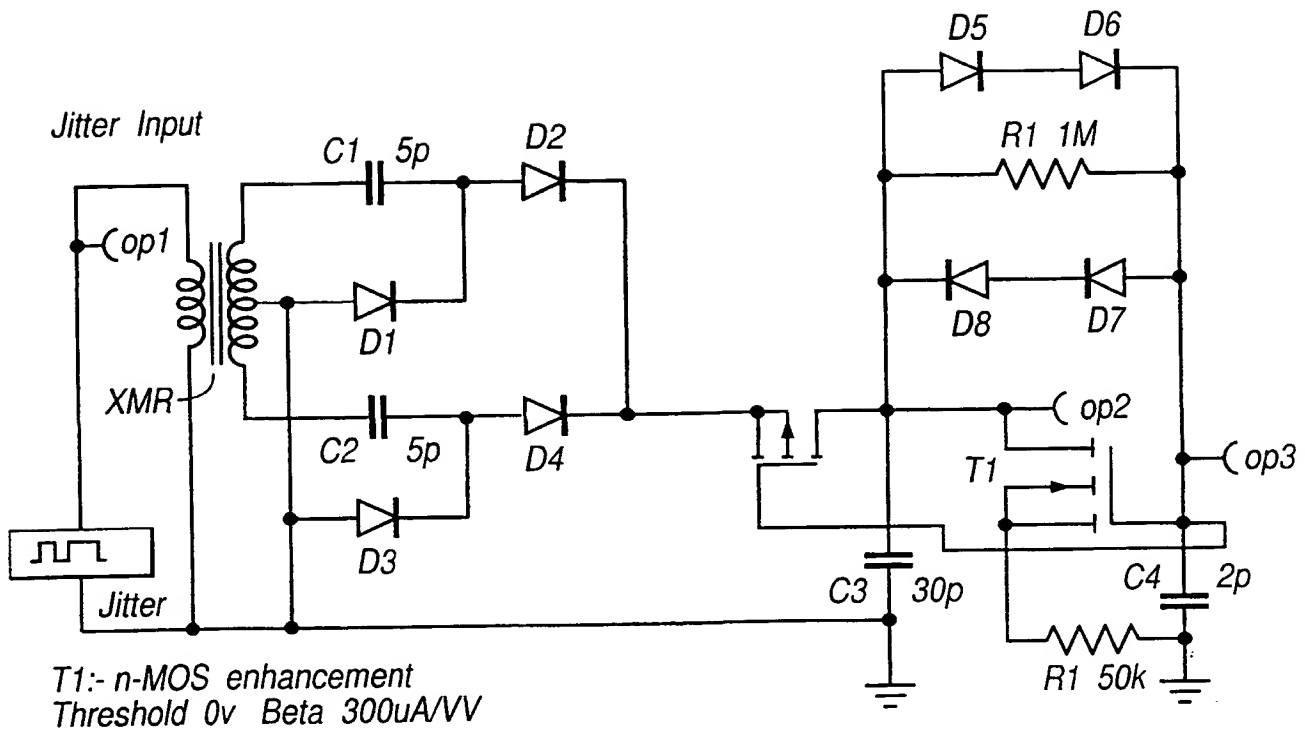


Fig. 8(c)

11/12



op2 and op3 to differential comparator

Mean $F_{in} = 417\text{kHz}$ and $1/3$ rate phase jumps of 300 degrees
= Time Jitter of 1 usec in 2.4 usec at $1/3$ rate

Fig.9(a)

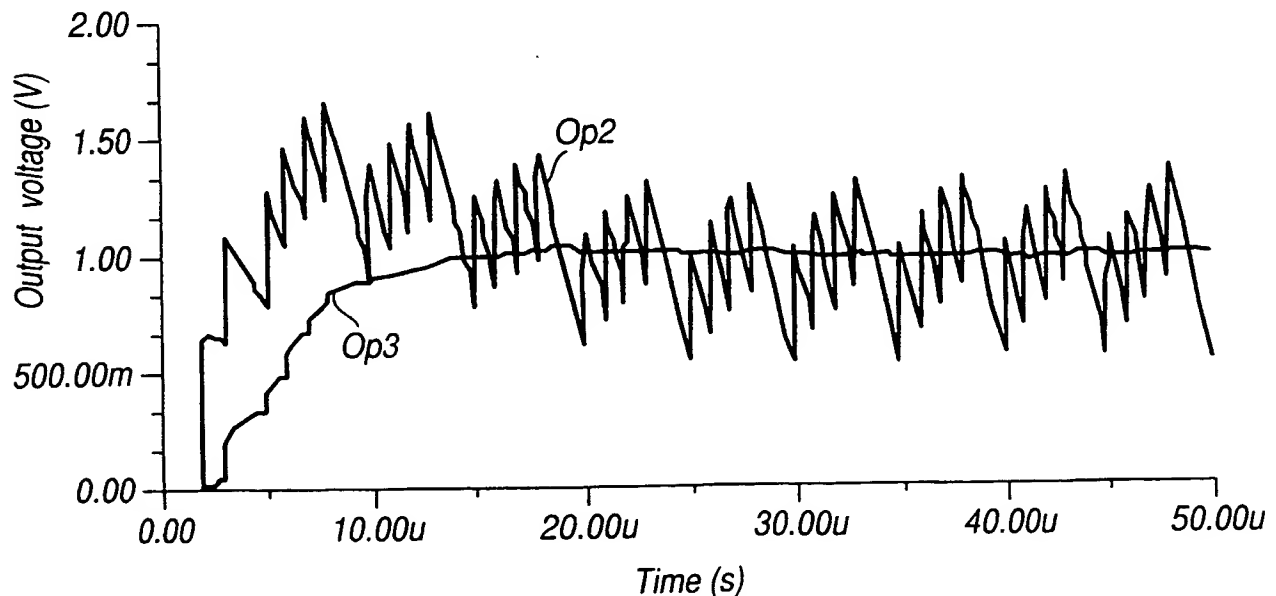


Fig.9(b)

09/83/413

12/12

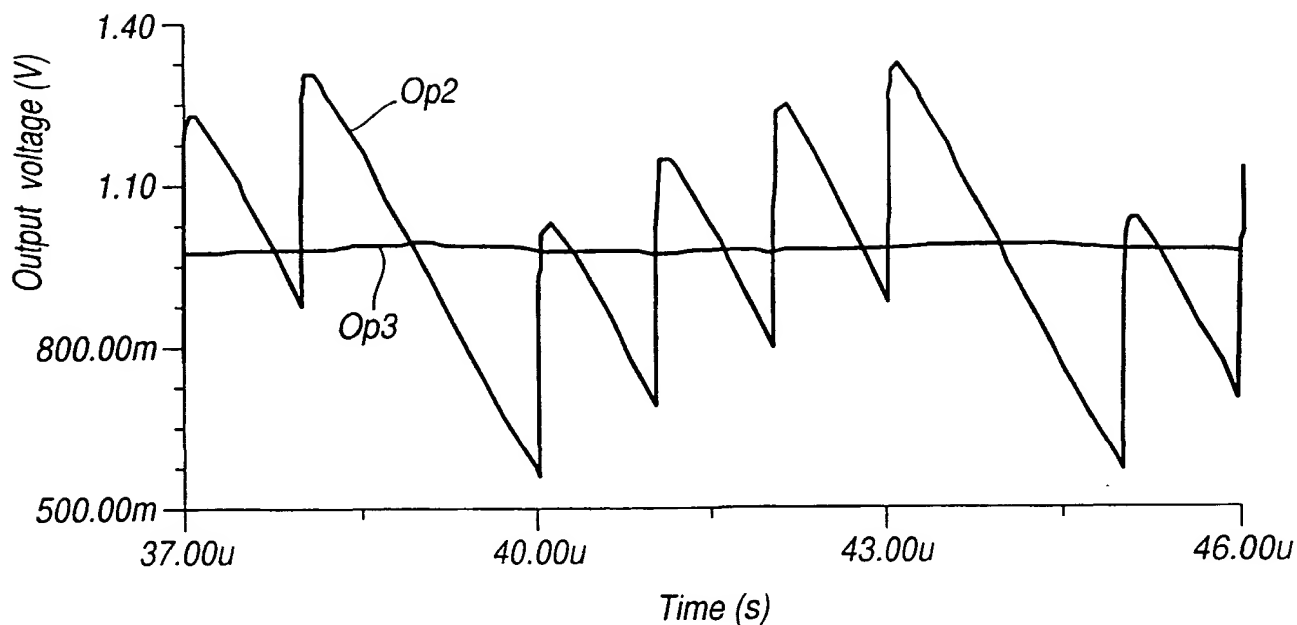


Fig.9(c)

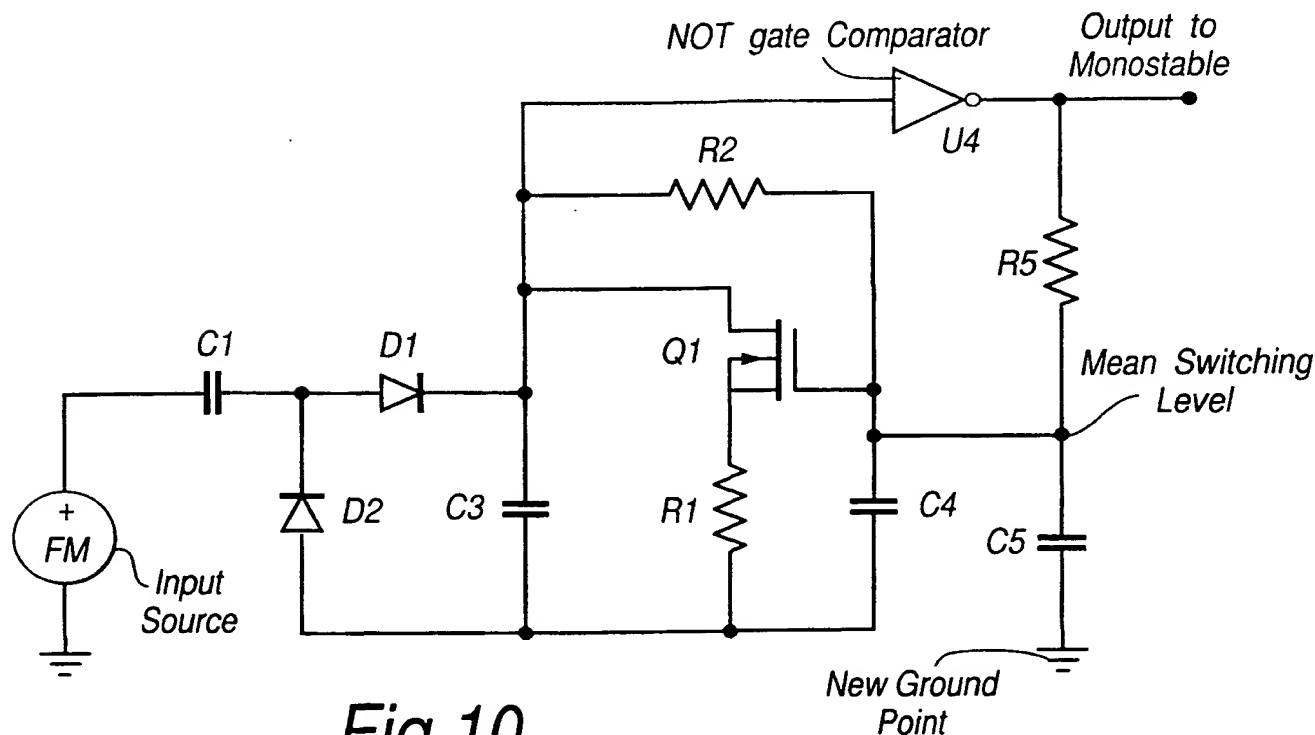


Fig.10